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=> d his ful

     (FILE 'HOME' ENTERED AT 17:46:19 ON 15 FEB 2006)

     FILE 'HCAPLUS' ENTERED AT 17:46:32 ON 15 FEB 2006
                E CHOW KEN/AU
L1           27 SEA ABB=ON  "CHOW KEN"/AU
                E GIL DANIEL W/AU
L2           50 SEA ABB=ON  ("GIL DANIEL"/AU OR "GIL DANIEL W"/AU OR "GIL
                DANIEL WALTER"/AU)
                E FANG WENKUI KEN/AU
L3            7 SEA ABB=ON  ("FANG WENKUI"/AU OR "FANG WENKUI KEN"/AU)
                E GARST MICHAEL/AU
L4          114 SEA ABB=ON  ("GARST MICHAEL"/AU OR "GARST MICHAEL E"/AU OR
                "GARST MICHAEL ELWOOD"/AU)
                E WHEELER LARRY A/AU
L5           64 SEA ABB=ON  ("WHEELER LARRY A"/AU OR "WHEELER LARRY ALLEN"/AU)

L6            4 SEA ABB=ON  L1 AND L2 AND L3 AND L4 AND L5
                SELECT RN L6 1-4
                SELECT RN L6 1

     FILE 'REGISTRY' ENTERED AT 17:48:24 ON 15 FEB 2006
L7            5 SEA ABB=ON  (366786-91-6/BI OR 141-43-5/BI OR 2740-88-7/BI OR
                366787-56-6/BI OR 61290-32-2/BI)

     FILE 'HCAPLUS' ENTERED AT 17:48:30 ON 15 FEB 2006
L8            4 SEA ABB=ON  L6 AND L7

     FILE 'REGISTRY' ENTERED AT 17:49:31 ON 15 FEB 2006
L9                STRUCTURE 366786-91-6 — located via Inventor Search
L10           1 SEA SSS SAM L9
L11           7 SEA SSS FUL L9  7 compds from Reg. See attached "Ques Yes" for structure

     FILE 'HCAPLUS' ENTERED AT 17:50:12 ON 15 FEB 2006
L12           7 SEA ABB=ON  L11
L13           4 SEA ABB=ON  L12 AND (PRD<20011019 OR PD<20011019)  4 cits from CA Plus

     FILE 'USPATFULL' ENTERED AT 17:56:18 ON 15 FEB 2006
L14           0 SEA ABB=ON  L12 AND (PRD<20011019 OR PD<20011019)  0 cits in USPatFull

     FILE HOME

     FILE HCAPLUS

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     FILE COVERS 1907 - 15 Feb 2006  VOL 144 ISS 8
     FILE LAST UPDATED: 14 Feb 2006  (20060214/ED)

     New CAS Information Use Policies, enter HELP USAGETERMS for details.
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This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE REGISTRY
Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 14 FEB 2006 HIGHEST RN 874270-88-9
DICTIONARY FILE UPDATES: 14 FEB 2006 HIGHEST RN 874270-88-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

****
* *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
* *
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Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

FILE USPATFULL
FILE COVERS 1971 TO PATENT PUBLICATION DATE: 14 Feb 2006 (20060214/PD)
FILE LAST UPDATED: 14 Feb 2006 (20060214/ED)
HIGHEST GRANTED PATENT NUMBER: US7000250
HIGHEST APPLICATION PUBLICATION NUMBER: US2006031974
CA INDEXING IS CURRENT THROUGH 14 Feb 2006 (20060214/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 14 Feb 2006 (20060214/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2005
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2005

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L9                STR
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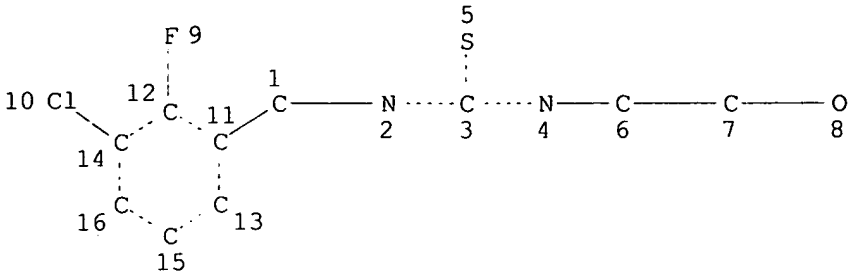


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NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  16

STEREO ATTRIBUTES: NONE
L11           7 SEA FILE=REGISTRY SSS FUL L9
L12           7 SEA FILE=HCAPLUS ABB=ON  L11
L13           4 SEA FILE=HCAPLUS ABB=ON  L12 AND (PRD<20011019 OR PD<20011019)
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L13 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:521523 HCAPLUS
DOCUMENT NUMBER: 137:73273
TITLE: Adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain
INVENTOR(S): Gil, Daniel W.; Aoki, Kei Roger
PATENT ASSIGNEE(S): Allergan Sales, Inc., USA
SOURCE: PCT Int. Appl., 76 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002053177	A2	20020711	WO 2001-US48651	20011214 <--
WO 2002053177	A3	20030918		
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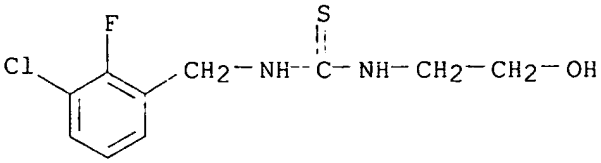
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 6787517	B1	20040907	US 2000-751053	20001229
CA 2433332	AA	20020711	CA 2001-2433332	20011214 <--
EP 1363674	A2	20031126	EP 2001-990212	20011214 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2005506277	T2	20050303	JP 2002-554126	20011214 <--
US 2004146532	A1	20040729	US 2004-791434	20040301 <--
PRIORITY APPLN. INFO.:			US 2000-751053 A	20001229 <--
			WO 2001-US48651 W	20011214

OTHER SOURCE(S): MARPAT 137:73273

AB Agents for treating pain, methods for producing the agents, and methods for treating pain by administration to a patient of a therapeutically effective amount of the agent, are disclosed. The agent may include a clostridial neurotoxin, a fragment or a derivative thereof, attached to a targeting component, wherein the targeting component is selected form a group consisting of compds. which selectively binds at the α2b or α2b/α2c adrenergic receptor subtype(s) as compared to other binding sites, e.g. the α2a adrenergic receptor subtype.

IT **366786-91-6D**, conjugates
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

RN 366786-91-6 HCAPLUS
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



L13 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:369027 HCAPLUS
DOCUMENT NUMBER: 136:363872
TITLE: Preparation of thiourea compounds for modulating α-adrenergic receptor activity and use in the treatment of pain
INVENTOR(S): Chow, Ken; Gil, Daniel W.; Fang, Wenkui; Garst, Michael E.; Wheeler, Larry A.
PATENT ASSIGNEE(S): Allergan Sales, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S. Ser. No. 548,315, abandoned.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002058839	A1	20020516	US 2001-778975	20010205 <--
US 6545182	B2	20030408		
PRIORITY APPLN. INFO.:			US 2000-548315 B2	20000413 <--

OTHER SOURCE(S): MARPAT 136:363872
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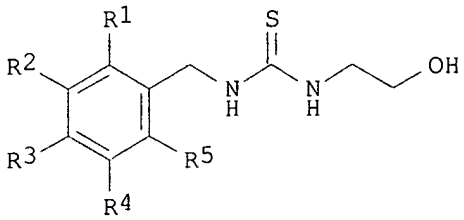


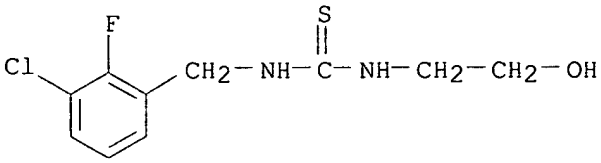
I

AB Methods and compns. are disclosed which use thiourea compds. I (R1, R5 = halo, alkyl, alkoxy, etc.; R2, R4 = halo, alkyl, alkoxy, etc.; R3 = F, H), and alkyl esters thereof, for the treatment of pain. Preparation of I [R1 = F; R2 = Cl; R3-R5 = H] which showed EC50 of 16 nM and 457 nM at α2B and α2C receptor in RSAT assay, was given. Particularly disclosed are compns. for the treatment of chronic pain, and methods for their use.

IT **366786-91-6P 366786-99-4P 366787-14-6P 366787-16-8P 366787-23-7P 366787-38-4P 366787-39-5P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of thiourea compds. for modulating α-adrenergic receptor

activity and use in treatment of pain)

RN 366786-91-6 HCAPLUS
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



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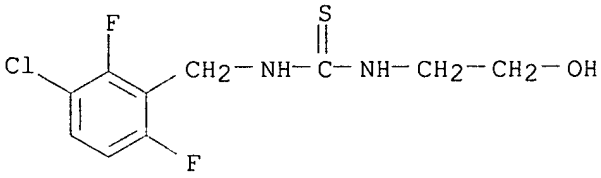

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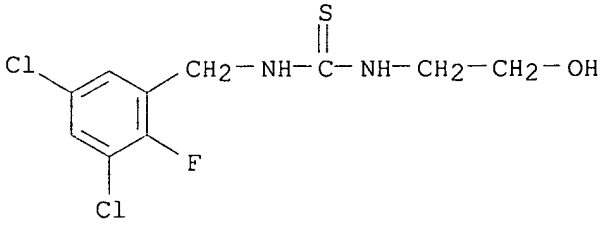

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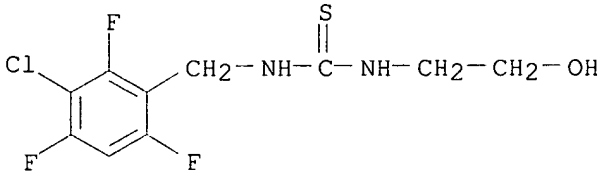
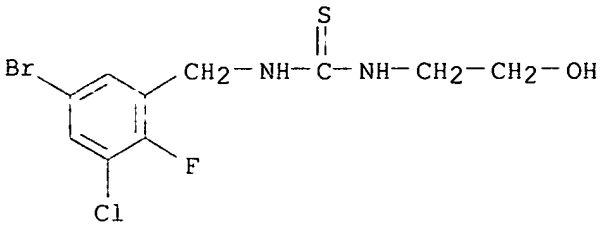
CN Thiourea, N-[(3-chloro-2,4,6-trifluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



RN 366787-23-7 HCAPLUS
CN Thiourea, N-[(5-bromo-3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



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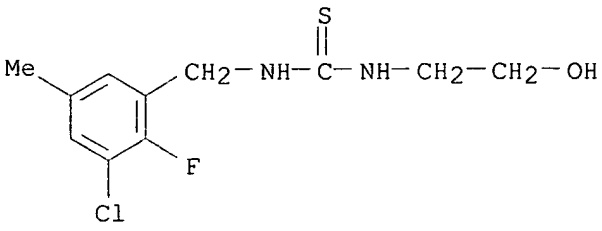

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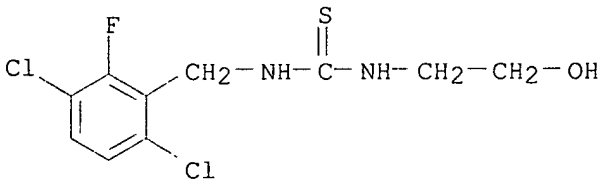

L13 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:780662 HCAPLUS
DOCUMENT NUMBER: 135:327361
TITLE: Methods and compositions using benzylthiourea derivatives for modulating alpha adrenergic receptor activity
INVENTOR(S): Chow, Ken; Gil, Daniel W.; Fang, Wenkui Ken; Garst, Michael E.; Wheeler, Larry A.
PATENT ASSIGNEE(S): Allergan Sales, Inc., USA
SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001078703	A2	20011025	WO 2001-US11843	20010411 <--
WO 2001078703	A3	20020321		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6313172	B1	20011106	US 2000-548410		20000413
CA 2406057	AA	20011025	CA 2001-2406057		20010411 <--
EP 1280525	A2	20030205	EP 2001-926876		20010411 <--
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AT 288747	E	20050215	AT 2001-926876		20010411 <--
ES 2233627	T3	20050616	ES 2001-1926876		20010411 <--
HK 1051324	A1	20050916	HK 2003-103605		20030521 <--
PRIORITY APPLN. INFO.:			US 2000-548410	A	20000413 <--
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OTHER SOURCE(S): MARPAT 135:327361

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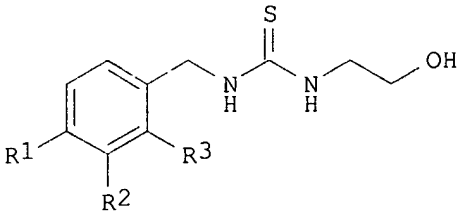

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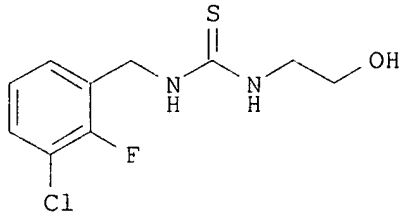


II

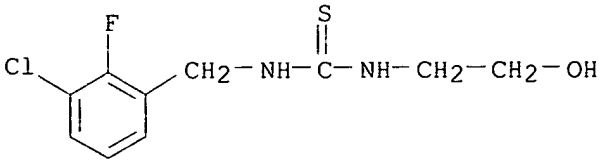
AB The invention discloses benzylthiourea derivs. I (R1, R3 = F, H; R2 = Cl, H; with provisos, and alkyl esters thereof) as α2-adrenergic receptor modulators. The invention also describes the synthesis of a compound II (wherein R1= H, R2= Cl and R3 = F). The effects of these disclosed compds. on acute and chronic pain, their sedative action and their cardiovascular effects are described.

IT **366786-91-6P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(benzylthiourea derivs. for modulating alpha adrenoceptor activity and their application in pain therapy)

RN 366786-91-6 HCAPLUS
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(benzylthiourea derivs. for modulating alpha adrenoceptor activity and their application in pain therapy

L13 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:780661 HCAPLUS
DOCUMENT NUMBER: 135:298811
TITLE: Thiourea compounds for modulating α-adrenergic receptor activity, preparation, compositions, and use in the treatment of pain
INVENTOR(S): Chow, Ken; Gil, Daniel W.; Fang, Wenkui Ken; Garst, Michael E.; Wheeler, Larry A.
PATENT ASSIGNEE(S): Allergan Sales, Inc., USA
SOURCE: PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001078702	A2	20011025	WO 2001-US11842	20010411 <--
WO 2001078702	A3	20020321		
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OTHER SOURCE(S): MARPAT 135:298811
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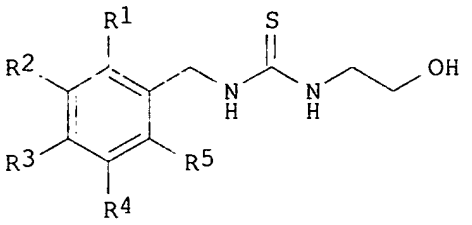
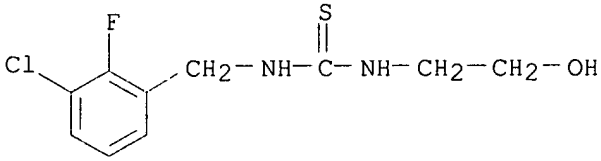


I

AB Methods and compns. are disclosed which use thiourea compds. I (R1, R2, R4, R5 = H, OH, C1-3 alkyl, etc.; R3 = H, F), and alkyl esters thereof, for the treatment of pain. Particularly disclosed are compns. for the treatment of chronic pain, and methods for their use.

IT **366786-91-6 366786-99-4 366787-14-6 366787-16-8 366787-23-7 366787-38-4 366787-39-5**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(thiourea compds. for modulating α-adrenergic receptor activity, preparation, compns., and use in treatment of pain)

RN 366786-91-6 HCAPLUS
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



RN 366786-99-4 HCAPLUS
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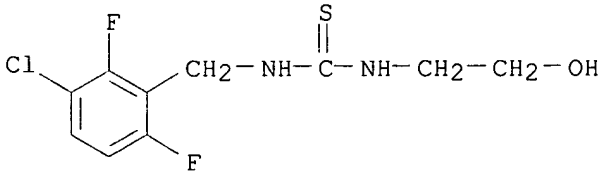
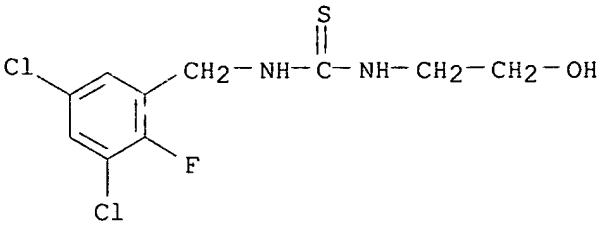
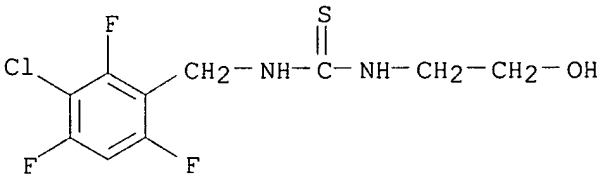


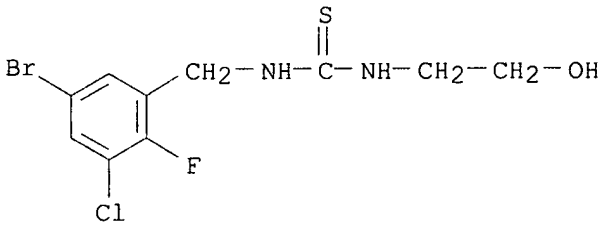
RN 366787-14-6 HCAPLUS
CN Thiourea, N-[(3,5-dichloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



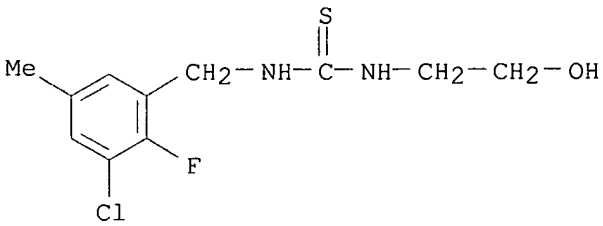
RN 366787-16-8 HCAPLUS
CN Thiourea, N-[(3-chloro-2,4,6-trifluorophenyl)methyl]-N'-(2-hydroxyethyl)-
(9CI) (CA INDEX NAME)



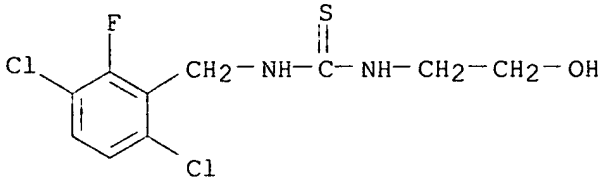
RN 366787-23-7 HCAPLUS
CN Thiourea, N-[(5-bromo-3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)-
(9CI) (CA INDEX NAME)



RN 366787-38-4 HCAPLUS
CN Thiourea, N-[(3-chloro-2-fluoro-5-methylphenyl)methyl]-N'-(2-hydroxyethyl)-
(9CI) (CA INDEX NAME)



RN 366787-39-5 HCAPLUS
CN Thiourea, N-[(3,6-dichloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)-
(9CI) (CA INDEX NAME)

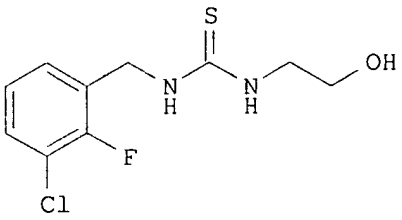


=> d ibib abs hitstr l8 1-4

L8 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:334962 HCAPLUS
DOCUMENT NUMBER: 138:331737
TITLE: Methods and compositions for modulating α adrenergic receptor activity, and therapeutic use thereof
INVENTOR(S): **Chow, Ken; Gil, Daniel W.; Fang, Wenkui Ken; Garst, Michael E.; Wheeler, Larry A.**
PATENT ASSIGNEE(S): Allergan, Inc., USA
SOURCE: PCT Int. Appl., 35 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003035178	A1	20030501	WO 2002-US32571	20021011
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003092766	A1	20030515	US 2001-39827	20011019
PRIORITY APPLN. INFO.:			US 2001-39827 A	20011019

OTHER SOURCE(S): MARPAT 138:331737
GI



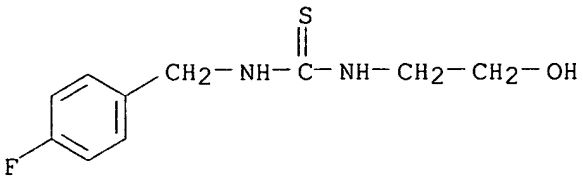
I

AB Methods and compns. are discloses for the treatment of pain and intraocular pressure. Particularly disclosed are compns. for the treatment of chronic pain, glaucoma, and methods for their use. Compds. of the invention include e.g. I (preparation given).

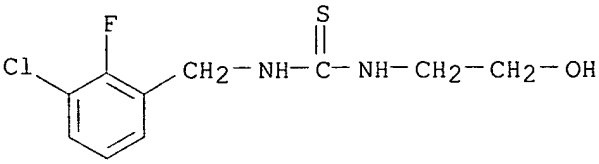
IT **61290-32-2P 366786-91-6P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(thiourea derivs., preparation and use in treatment of glaucoma and pain)

RN 61290-32-2 HCAPLUS
CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX

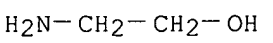
NAME)



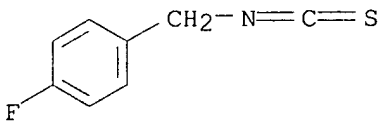
RN 366786-91-6 HCAPLUS
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



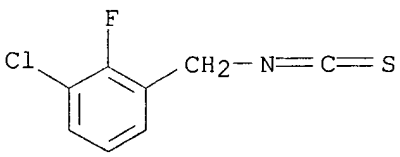
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(thiourea derivs., prepn. and use in treatment of glaucoma and pain
IT **141-43-5**, Ethanolamine, reactions **2740-88-7**, 4-Fluorobenzyl isothiocyanate **366787-56-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(thiourea derivs., preparation and use in treatment of glaucoma and pain)
RN 141-43-5 HCAPLUS
CN Ethanol, 2-amino- (8CI, 9CI) (CA INDEX NAME)



RN 2740-88-7 HCAPLUS
CN Benzene, 1-fluoro-4-(isothiocyanatomethyl)- (9CI) (CA INDEX NAME)



RN 366787-56-6 HCAPLUS
CN Benzene, 1-chloro-2-fluoro-3-(isothiocyanatomethyl)- (9CI) (CA INDEX NAME)

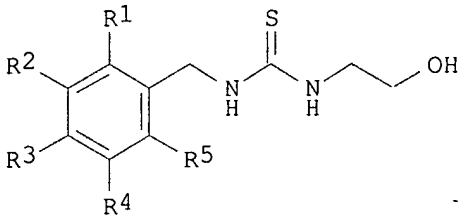


REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:369027 HCAPLUS
DOCUMENT NUMBER: 136:363872
TITLE: Preparation of thiourea compounds for modulating α-adrenergic receptor activity and use in the treatment of pain
INVENTOR(S): **Chow, Ken; Gil, Daniel W.; Fang, Wenkui; Garst, Michael E.; Wheeler, Larry A.**
PATENT ASSIGNEE(S): Allergan Sales, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S. Ser. No. 548,315, abandoned.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002058839	A1	20020516	US 2001-778975	20010205
US 6545182	B2	20030408		
PRIORITY APPLN. INFO.:			US 2000-548315 B2	20000413

OTHER SOURCE(S): MARPAT 136:363872
GI

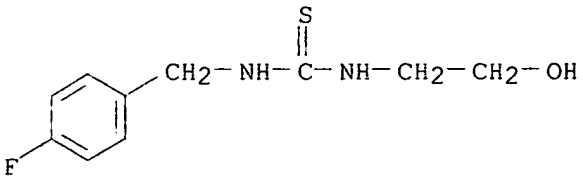


I

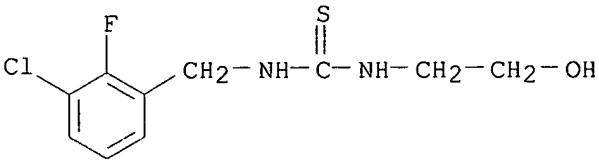
AB Methods and compns. are disclosed which use thiourea compds. I (R1, R5 = halo, alkyl, alkoxy, etc.; R2, R4 = halo, alkyl, alkoxy, etc.; R3 = F, H), and alkyl esters thereof, for the treatment of pain. Preparation of I [R1 = F; R2 = Cl; R3-R5 = H] which showed EC50 of 16 nM and 457 nM at α2B and α2C receptor in RSAT assay, was given. Particularly disclosed are compns. for the treatment of chronic pain, and methods for their use.

IT **61290-32-2P 366786-91-6P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of thiourea compds. for modulating α-adrenergic receptor activity and use in treatment of pain)

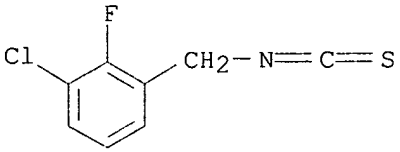
RN 61290-32-2 HCAPLUS
CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



RN 366786-91-6 HCAPLUS
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



IT **366787-56-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction; preparation of thiourea compds. for modulating α-adrenergic receptor activity and use in treatment of pain)
RN 366787-56-6 HCAPLUS
CN Benzene, 1-chloro-2-fluoro-3-(isothiocyanatomethyl)- (9CI) (CA INDEX NAME)



L8 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:780662 HCAPLUS
DOCUMENT NUMBER: 135:327361
TITLE: Methods and compositions using benzylthiourea derivatives for modulating alpha adrenergic receptor activity
INVENTOR(S): **Chow, Ken; Gil, Daniel W.; Fang, Wenkui Ken; Garst, Michael E.; Wheeler, Larry A.**
PATENT ASSIGNEE(S): Allergan Sales, Inc., USA
SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001078703	A2	20011025	WO 2001-US11843	20010411

WO 2001078703 A3 20020321
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

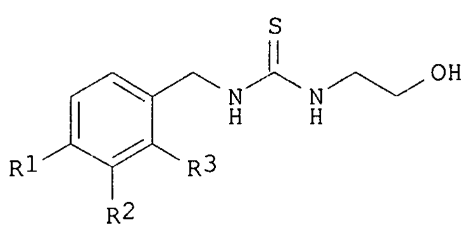
US 6313172	B1	20011106	US 2000-548410		20000413
CA 2406057	AA	20011025	CA 2001-2406057		20010411
EP 1280525	A2	20030205	EP 2001-926876		20010411
EP 1280525	B1	20050209			

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

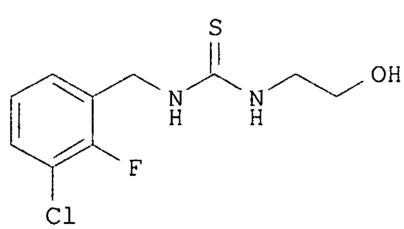
JP 2003530430	T2	20031014	JP 2001-576004		20010411
NZ 522027	A	20041126	NZ 2001-522027		20010411
AT 288747	E	20050215	AT 2001-926876		20010411
ES 2233627	T3	20050616	ES 2001-1926876		20010411
HK 1051324	A1	20050916	HK 2003-103605		20030521
PRIORITY APPLN. INFO.:			US 2000-548410	A	20000413
			WO 2001-US11843	W	20010411

OTHER SOURCE(S): MARPAT 135:327361

GI



I

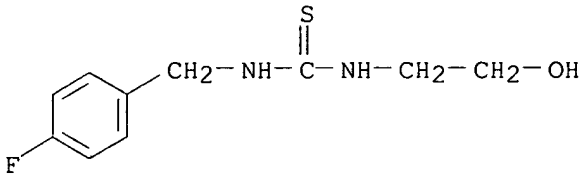


II

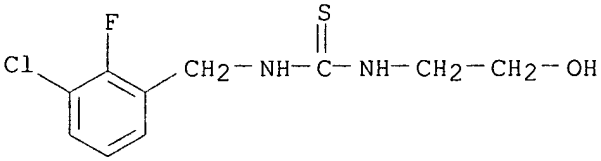
AB The invention discloses benzylthiourea derivs. I (R1, R3 = F, H; R2 = Cl, H; with provisos, and alkyl esters thereof) as α2-adrenergic receptor modulators. The invention also describes the synthesis of a compound II (wherein R1= H, R2= Cl and R3 = F). The effects of these disclosed compds. on acute and chronic pain, their sedative action and their cardiovascular effects are described.

IT **61290-32-2P 366786-91-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(benzylthiourea derivs. for modulating alpha adrenoceptor activity and

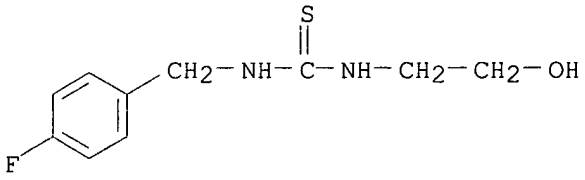
their application in pain therapy)
RN 61290-32-2 HCAPLUS
CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



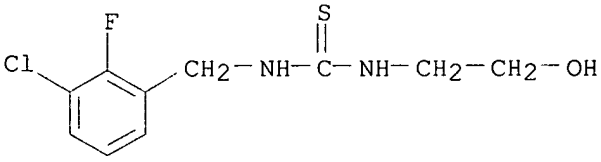
RN 366786-91-6 HCAPLUS
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



IT **61290-32-2D**, alkyl esters **366786-91-6D**, alkyl esters
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(benzylthiourea derivs. for modulating alpha adrenoceptor activity and their application in pain therapy)
RN 61290-32-2 HCAPLUS
CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)

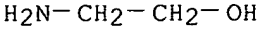


RN 366786-91-6 HCAPLUS
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)

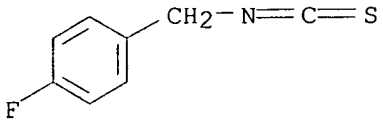


IT **141-43-5**, Ethanolamine, reactions **2740-88-7**, 4-Fluoro

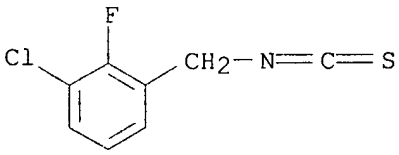
benzyl isothiocyanate **366787-56-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(benzylthiourea derivs. for modulating alpha adrenoceptor activity and their application in pain therapy)
RN 141-43-5 HCAPLUS
CN Ethanol, 2-amino- (8CI, 9CI) (CA INDEX NAME)



RN 2740-88-7 HCAPLUS
CN Benzene, 1-fluoro-4-(isothiocyanatomethyl)- (9CI) (CA INDEX NAME)



RN 366787-56-6 HCAPLUS
CN Benzene, 1-chloro-2-fluoro-3-(isothiocyanatomethyl)- (9CI) (CA INDEX NAME)



L8 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:780661 HCAPLUS
DOCUMENT NUMBER: 135:298811
TITLE: Thiourea compounds for modulating α-adrenergic receptor activity, preparation, compositions, and use in the treatment of pain
INVENTOR(S): **Chow, Ken; Gil, Daniel W.; Fang, Wenkui Ken; Garst, Michael E.; Wheeler, Larry A.**
PATENT ASSIGNEE(S): Allergan Sales, Inc., USA
SOURCE: PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

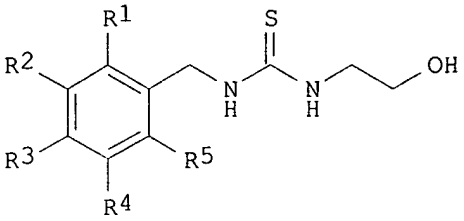
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001078702	A2	20011025	WO 2001-US11842	20010411
WO 2001078702	A3	20020321		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,

SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2405796	AA	20011025	CA 2001-2405796		20010411
EP 1280524	A2	20030205	EP 2001-926875		20010411
JP 2003530429	T2	20031014	JP 2001-576003		20010411
PRIORITY APPLN. INFO.:			US 2000-548315	A	20000413
			WO 2001-US11842	W	20010411

OTHER SOURCE(S): MARPAT 135:298811
GI



I

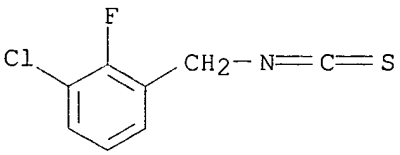
AB Methods and compns. are disclosed which use thiourea compds. I (R1, R2, R4, R5 = H, OH, C1-3 alkyl, etc.; R3 = H, F), and alkyl esters thereof, for the treatment of pain. Particularly disclosed are compns. for the treatment of chronic pain, and methods for their use.

IT **141-43-5**, Ethanolamine, reactions **366787-56-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction; thiourea compds. for modulating α-adrenergic receptor activity, preparation, compns., and use in treatment of pain)

RN 141-43-5 HCAPLUS
CN Ethanol, 2-amino- (8CI, 9CI) (CA INDEX NAME)

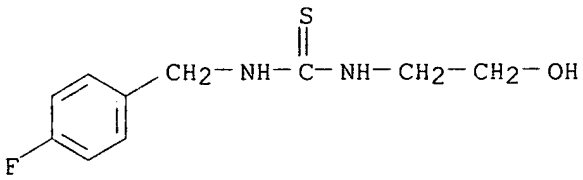
$H_2N-CH_2-CH_2-OH$

RN 366787-56-6 HCAPLUS
CN Benzene, 1-chloro-2-fluoro-3-(isothiocyanatomethyl)- (9CI) (CA INDEX NAME)



IT **61290-32-2 366786-91-6**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(thiourea compds. for modulating α-adrenergic receptor activity,

preparation, compns., and use in treatment of pain)
RN 61290-32-2 HCAPLUS
CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



RN 366786-91-6 HCAPLUS
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)